

MR1679-259

Serial Number: 10/718,673

Reply to Office Action dated 15 December 2005

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) An integrated charger for use in a car comprising:
 - a) a charging seat having a charging groove for receiving and charging dry batteries, a DC-DC converter and a charging control circuit, the charging control circuit including a pulse width modulation (PWM) control switch having an input coupled to an output of the DC-DC converter, a microprocessor having an output coupled to the PWM control switch, a voltage detection circuit having an output coupled to the microprocessor, and a current detection circuit having an output coupled to the microprocessor, wherein, responsive to voltage and current detection of the batteries received within the charging groove, the microprocessor controls the pulse width modulation control switch for switching the power supplied from the DC-DC converter to the batteries, controlling the voltage and current supplied to the batteries as they are charged; and
 - b) a power supply head formed in a cylindrical shape and adapted to a cigarette lighter socket in the car for insertion therein to lead the power source into the charging seat, the power supply head and the charging seat being

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integrated in a body in such a manner that the power cords embedded within the power supply head create an electrical connection with the DC-DC converter.

2. (Original) The integrated charger for use in a car as recited in claim 1 wherein the power supply head and the charging seat are attached to each other in a body.

3. (Original) The integrated charger for use in a car as recited in claim 1 wherein the power supply head is pivotally connected to the charging seat so that the power supply head is swiveled on a pivot in a sloping position.

4. (Original) The integrated charger for use in a car as recited in claim 1 wherein the power supply head includes a positive terminal telescopically extended from the center of the distal end of the power supply head and two negative terminals projecting from both sides of the circumference thereof in an arched form.

5. (Original) The integrated charger for use in a car as recited in claim 1 wherein the charging groove is so configured that any types of dry batteries, such as AAA, AA, Li-ion, Ni-MH, Ni-Cd, etc., can be fitted into the charging groove.

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6. (Cancelled).